Cognitive Impasse: The Self-Perpetuating Cycle of Learned Behaviors and Cognitive Biases.

10.6084/m9.figshare.27367785

Andrew Lehti
October 31, 2024

Learned behaviors and cognitive biases have perpetuated trait inheritance across generations, stemming from an education system established in the fourth century CE, forming a self-sustaining structure resembling a virus.

The Semmelweis Reflex is the tendency to reject new evidence because it contradicts established beliefs. Named after Ignaz Semmelweis, who introduced handwashing to reduce infections but was dismissed for challenging medical norms. After being dismissed from his position, he faced opposition and isolation within the medical community, as his handwashing theories were ridiculed and ignored. Eventually, he was committed to a mental asylum, where he reportedly became violent. Soon after his admission, he sustained a severe wound on his hand, potentially from a beating by the staff or another violent encounter, which led to sepsis. This infection caused his death at just 47.

Updated 11/5/2024

To alleviate common preconceived discomfort regarding accessibility, it is assured that no paywall will be implemented; this research shall remain freely accessible as it is simple and important for progression.

10.6084/m9.figshare.27367785

Statement

As you read these statements, take a moment to tune into your internal reactions. Notice any physical sensations, such as an urge to laugh or an involuntary eye-roll—subtle shifts that might signal discomfort. Pay attention to vocal responses, like a scoff or a sound of disbelief, that may arise naturally, regardless of the information's accuracy. Often, these instinctual reactions occur simply because the ideas challenge existing beliefs or assumptions, triggering a reflexive resistance. This is the beginning of a cognitive impasse that embodies all cognitive biases in eight stages, manifesting as feelings of guilt, doom, and even over to a headache.

Next, focus on your internal thoughts—those automatic, often dismissive reactions like "What a joke" or "That can't be right." These responses provide clues to your cognitive biases and reveal how challenging it can be to explore unfamiliar ideas logically. The crux of cognitive bias lies in self-awareness and an honest examination of your responses. Observing these physical, vocal, and mental cues can help you stay truthful with yourself, fostering a clearer understanding of how deeply held beliefs may create friction against new or conflicting ideas.

Abstract

Throughout their educational experience, spanning approximately thirteen years, **these individuals were systematically conditioned to avoid error at all costs.** This prolonged conditioning has ingrained a profound aversion to admitting mistakes, leaving them psychologically unequipped to acknowledge personal faults or errors. In adulthood, this aversion manifests as an unconscious inability to recognize their own fallibility, driving behaviors rooted in a deeply embedded need to validate their correctness.

As a result, these individuals may resort to any measure—whether through self-deception or external manipulation—to uphold their self-perception of infallibility. Such actions stem from a long-standing, internalized fear, one fostered by an educational paradigm that equated academic failure or poor grades with life failure. This paradigm has, in essence, conditioned them to equate imperfection with severe consequences, thereby creating a sense of existential threat in situations where they might otherwise admit fault or error.

The educational model established in the 4th century CE has passed down learned behaviors and cognitive biases across generations spanning nearly two millennia. This system has become self-perpetuating, reinforcing rigid thinking patterns that hinder intellectual growth and adaptability, and have only begun to become stronger. This paper examines the stages of response to challenging information, the concept of cognitive inertia, and various cognitive biases—including the Galileo Fallacy—that contribute to a cognitive impasse. By understanding and identifying these patterns, individuals can cultivate self-awareness and overcome these constraints to foster intellectual expansion.

Echos of the Past

The writer does not specifically research people to learn about them and holds no particular preference for figures like Albert Einstein, Nikola Tesla, Richard Feynman, or Isaac Newton. Their knowledge of Newton is the most extensive, arising from a need to study his approach to negative numbers, ultimately leading them to reformulate one of Newton's algebraic methods. Although their familiarity with these figures' broader ideals is limited, a recent evaluation required studying their behaviors. This prompted a strong resonance with Einstein's views on intelligence and education—views often attributed to him, even though some quotes may not be exact. **Nevertheless, these sayings effectively reflect Einstein's outlook, humor, and beliefs.** The writer emphasizes that this section was researched after finalizing the paper as is the author's dedicated learning approach, **and that these parallels suggest that genius does not exist**—only an ability to skillfully navigate cognitive bias.

The writer laments that many reject evidence conflicting with their beliefs, recognizing this as clear bias and an implied belief in the infallibility of academia. This alignment does not stem from a belief in genius per se but rather that geniuses are adept at efficiently navigating cognitive biases, often due to a lack of formal education or parents who fostered philosophical and creative pursuits. In a sense, their discoveries, though simple in hindsight, were not as unattainable as often believed.

The writer argues that everyone has unique intelligence and criticizes the education system for fostering only one type, which results in rigid minds focused on memory. They note that many historical geniuses were critical of traditional education, and to the writer, this stance is understandable. A quick study of their work shows that they understood this same core principle.

This paraphrasing of Albert Einstein captures his character well, though it's not the verbatim quote that rigid minds might prefer. At its core, this reflects an effective approach to navigating cognitive biases: *"The measure of intelligence is the ability to change your mind. It's not that I'm so smart. But I stay with the questions much longer."*

Einstein, Albert

Einstein's views on education, memory, and intelligence reveal a profound critique of traditional educational systems, which he saw as restrictive rather than supportive of authentic learning.

His statements suggest a belief that formal schooling often suppresses curiosity, creativity, and independent thought, focusing instead on rote memorization and exam preparation rather than fostering a mindset inclined toward exploration and innovation. By suggesting that "education" is what remains after one has forgotten what one has learned in school, and remarking that the only thing that interferes with learning is education, underscores his view that true learning exists beyond the classroom and is often hindered by the very institutions designed to support it. **This was never their intention.**

His reflections on memory and learning reveal a preference for intellectual flexibility over the mere retention of facts, asserting that "the value of a college education is not the learning of many facts but the training of the mind to think." For Einstein, the mind's true strength lay not in its storage of information but in its creative engagement with ideas—a sentiment reinforced by his belief that "imagination is more important than knowledge." He regarded intelligence as dynamic and expansive, defined not by the accumulation of information but by the capacity to use imagination to drive progress and innovation.

These observations align closely with Einstein's character and recurring themes in his writing and interviews, portraying a mind that prioritized inquiry, adaptability, and imagination over passive knowledge reception. His critiques suggest a visionary who valued curiosity and intellectual independence, believing that genuine education should aim to cultivate these qualities rather than merely producing graduates skilled in standardized assessment.

10.6084/m9.figshare.27367785

Unusual Upbringing

From a young age, my intellectual development was profoundly influenced by my parents, especially my mother, who was 38 at my birth, and my father, who was 40; however, it was primarily my stepfather, then 42, who fostered my later years of exploratory and critical thought. My mother, in particular, introduced me to the concept of infinite, unending numbers, instilling a philosophical foundation that would shape my thinking for years to come. With her vast knowledge as a constant resource, she encouraged my curiosity, prompting me to explore and persistently examine “how” and “why” with unwavering commitment.

Unlike many parents I have observed, she met my endless questions with patience and support, never succumbing to frustration. When faced with questions she couldn’t answer, she would openly admit her uncertainty. Rather than discouraging my curiosity, she urged me to experiment and investigate further, challenging me to find my own understanding. Through this approach, she nurtured my intellectual and creative growth, creating an environment where my drive for exploration was both respected and continually inspired.

Her guidance, in essence, reflected the intellectual traditions of ancient Greece at its height—a time when elite scholars fostered creativity, imagination, and philosophical inquiry from a young age. This approach, starkly contrasting the later Roman emphasis on rote memorization, cultivated a foundation within me that values independent thought, critical inquiry, and an enduring passion for learning.

Experience with the Education System

Upon entering the formal education system in seventh grade, I initially struggled with math, resulting in poor performance for several months. By eleventh grade, however, I had made significant progress, placing me among the top math students in Minnesota. While many attribute this achievement to natural intelligence, they often overlook the commitment and eagerness to learn that drove it. Terms like "learning" and "education" never carried a stigma for me, but a period of increasing closed-mindedness began in seventh grade and continued through college until I turned 22. Only after leaving college did this mindset start to shift, though it took additional years to fully soften through pure perseverance.

To clarify my stance: this experience reaffirms a conviction I have long held—that **humans are not born with genius but have the potential to rise above an educational system that often restricts intellectual growth** through monotonous mechanical binary memorization. I have always viewed such memorization as unnecessary and have never made an effort to retain information artificially; if it stayed with me, it did so naturally.

I am interested in helping others overcome this cognitive impasse, which I believe limits intellectual development. The education system’s narrow focus on memory as intelligence risks disengaging those with strengths in one of the other 19 types of intelligence. This endeavor would be rewarding in itself, with no intention on my part to profit, as this does not interest or motivate me to research. Nonetheless, I recognize that any significant change must be managed thoughtfully and with precision.

Preface

Failure is often regarded as a way to learn, yet few people truly utilize this concept. Similarly, when you push beyond deflection, you often uncover layers of misunderstanding and cognitive bias. For instance, in my youth, I frequently encountered the phrase, “We’ve tried that before, and it didn’t work,” which I found alarming. Considering the fluidity of language, even with a small vocabulary, the possible meaningful combinations of words would easily number in the tens of decillions. Hearing the same ten words repeated across various situations—from people I considered closed-minded and uninteresting—was highly telling of the underlying mindset. Interestingly, the top 10 states where these phrases are most searched are: Oklahoma, New Mexico, Alabama, Mississippi, Georgia, Louisiana, Kansas, Arizona, Texas, and North Carolina.

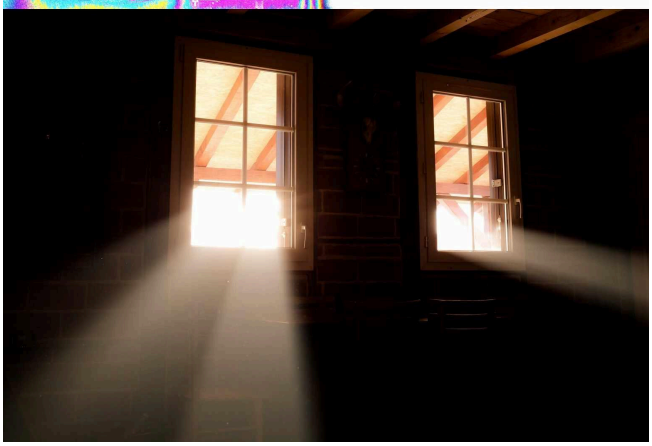
Sixteen years ago, I began challenging these statements by asking questions like, "What exactly did you try? When did you try it? Who carried it out? What were the results? Is there documentation?" While people can usually improvise an answer, introducing accountability—such as naming those involved or providing evidence—often leads them to deflect or suddenly excuse themselves.

The term "troll" is often used dismissively to sidestep opposing views, even when those views lack malice, functioning as a cognitive shortcut to avoid engaging with challenging ideas. This became apparent when observing its frequent use, even against logically sound content. Such avoidance can foster a form of confirmation bias mixed with a multitude of other biases, legitimizing dismissive reactions without substantive critique.

In one instance, a paper was shared with a university professor proposing that the speed of light might have been incorrectly measured. The argument suggested that light’s measurement relied on electromagnetic feedback rather than light itself, questioning the validity of traditional methods. The profressor, after seeing the title, dismissed it as trolling, adding that, if serious, such a claim would challenge foundational principles of physics—admitting to their prejudice.

In response, a question was posed: **perhaps this resistance** to foundational questioning explains why progress in physics has been largely mechanical rather than truly progressive, with research advancing only when it serves a practical, predetermined application. A response did not occur.

Subsequent observations raised questions about quantum theory, specifically the double-slit experiment, the use of imaginary numbers, issues with the Earth's magnetosphere and electromagnetic movement, behavioral clustering in birds potentially caused by feedback loops, and the possibility that a forensic technique I developed after an eyesight strain—allowing me to see electromagnetic waves, which I named PEM-Image analysis—could reveal what researchers claim is a "black hole," potentially confirming or disputing the billions invested in its study. And as a quick note on seeing electromagnetic waves, it's not as unusual as it seems; **on a very hot day, look at a wall outside, and you'll see their shadows.**



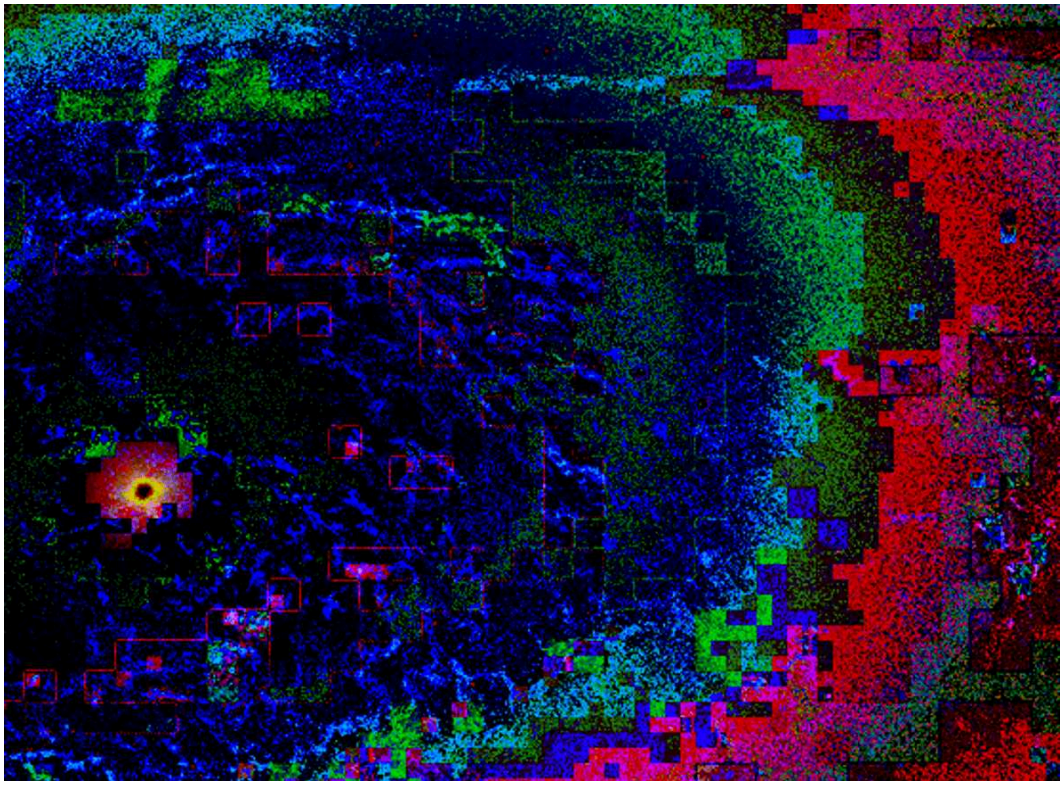
At first, this was met with praise—**until it revealed a truth that sent me spiraling, as I lost trust in an organization** I had once deeply admired, and once these findings were revealed, those that praised it, mocked it heavily. A person's outlook changes dramatically when they realize they've been deceived most of their life about something central to their interests. It can manifest feelings of anger, and learning to let go, really is freeing of the mind. Initially though, this was about the speed of light.

My intention was to provide the researcher with exploratory material, as I was focused on understanding human behavior rather than making the discovery myself—I lacked resources beyond my strong mathematical abilities. Their dismissal, however, allowed me to continue studying people and behaviors. At that time, my focus was on evaluating the Christian community. A few years later, I began sporadically posting online and sending emails, where I encountered extraordinary resistance, which then caused me to try and change the way I communicated with others, and tried an incredible amount of writing styles to try and get through to people, until **I realized that in order to get people to understand, they must have interest.**

Initially, this pushback bruised my ego, yet I persisted for several reasons, including a deliberate choice to challenge rigid academic conventions and their strict approach to writing. I began publishing papers and posts without proofreading, aiming to better understand human behavior and what people prioritize. This process became a means of self-improvement, improvisation, and, most importantly, cultivating humility.

Over the decade, **this work accumulated to approximately 23,000 hours of unpaid efforts within my primary disciplines**, driven solely by a desire to enact meaningful change and promote the idea that learning is deeply fulfilling and enjoyable when one has a genuine interest in it.

Unfortunately, the education system stigmatizes "education" and "learning" as uninspiring, weighed down by bureaucratic layers that often fail students and constrain talented teachers, instructors, and professors.



Pemi Analysis of the Andromeda Galaxy using +4-6 division over original with -1+1 vivid overlay

10.6084/m9.figshare.27367785

Introduction

Modern Western education traces its roots to the Roman Empire's efforts to consolidate control and standardize knowledge. While this system emphasized memory discipline and intellectual rigor, it inadvertently fostered mental rigidity that discourages critical thinking and openness to new ideas. This rigidity has led to a phenomenon known as the **Cognitive Impasse**, where individuals become mentally obstructed from questioning established norms due to inherited behaviors and biases.

The Education System

The education system, focused heavily on rigid testing and memorization, ingrains in students the fear of making mistakes from an early age, often penalizing curiosity and creative exploration. For over a decade, students are immersed in a system where the objective is not genuine understanding or innovative thinking but rather conformity to predefined answers. Mistakes, rather than being seen as opportunities for growth, become sources of shame and punishment, ingraining a lifelong fear of being "wrong." In such an environment, students are conditioned to view correctness as the sole pathway to success, creating a binary mindset where deviation is seen as failure.

This conditioning has profound effects on their cognitive development, as they are taught to prioritize rote memorization and recall over critical thinking, curiosity, or even a genuine desire to understand. Imagination, once an intrinsic part of learning, becomes suppressed as students learn that there is no room for creativity or unique perspective in standardized tests. This process fundamentally rewires their motivations, shifting from a natural thirst for knowledge to a survival instinct focused on avoiding error at all costs. Such an approach destroys the intrinsic joy of learning, replacing it with a mechanistic need to "get it right," no matter the subject or method.

By adulthood, these individuals often retain a deeply ingrained inability to admit mistakes or welcome new perspectives, as doing so challenges the core beliefs drilled into them. They perceive errors as threats to their sense of worth and stability, prompting them to resort to cognitive gymnastics, deflection, and self-manipulation to maintain the illusion of correctness. They may subconsciously avoid situations that might reveal gaps in their knowledge, effectively walling themselves off from growth or change. This manifests in both personal and professional contexts, where even constructive feedback feels threatening.

Rather than fostering adaptive, critical thinkers, this system yields individuals whose cognitive flexibility is stunted, trapped in a pattern of avoiding risk and innovation. Consequently, creativity and imagination suffer, as these individuals become locked into linear thinking, seeking only predictable outcomes they know will be "correct." Any deviation from this internalized framework feels uncomfortable, even unsafe, making it unlikely they will venture beyond the confines of what they were taught to memorize.

The Inner Workings of Cognitive Impasse Through Dissonance

In school, individuals are conditioned over approximately 13 years to view being "wrong" as inherently negative. This conditioning is not merely academic but becomes a deeply ingrained part of their self-concept and survival instincts. As students, they learned that mistakes equated to poor grades, which in turn were tied to the notion of a bleak future—a construct that acted as a looming punishment. In essence, **this environment solidifies a belief that personal worth and future security depend on avoiding error at all costs**.

The Role of Fight or Flight in Cognitive Dissonance

When confronted with challenging information that conflicts with their beliefs, these individuals experience an immediate **fight or flight response**. Here's how this response, conditioned through years of schooling, manifests in adulthood:

1. **Fear of Being "Wrong" as a Survival Mechanism**: The school system emphasizes correctness and penalizes mistakes, subtly ingraining a sense of **threat** around the idea of being wrong. By linking academic success with future security, the education system effectively wires individuals to perceive cognitive challenges, such as information that contradicts their beliefs, as threats to their self-worth and safety.

2. **Sympathetic Nervous System Activation**: When these individuals encounter beliefs or evidence that challenge their worldview, the brain triggers the **fight or flight response**, as it associates cognitive dissonance with the same fear of punishment they experienced in school. This causes the body to release stress hormones like cortisol and adrenaline, leading to physical symptoms such as a tight gut, rapid heartbeat, or even nausea—symptoms tied to the **inner workings of cognitive dissonance**.

3. **Self-Protection through Manipulation**: Subconsciously, these individuals have learned to avoid being "wrong" to prevent the threat associated with academic failure. As adults, this manifests as a drive to maintain their beliefs at any cost, sometimes resorting to self-deception or even manipulative behaviors. **Their internalized need to "be right" serves as a shield against cognitive dissonance**, preventing them from fully processing contradictory information. This behavior, rooted in school-based conditioning, reflects a self-preserving attempt to maintain mental and emotional security.

4. **Belief Perseverance as a Defense Mechanism**: Because they lack the ability to acknowledge their mistakes, these adults double down on their original beliefs when confronted with dissonance, a phenomenon known as **belief perseverance**. This reaction is akin to how students learned to defend themselves against academic penalties. When new information threatens their established beliefs, belief perseverance reinforces their existing views as a defensive measure to avoid the discomfort of cognitive dissonance and its physical effects.

5. **Conditioned Subconscious Compliance and Intellectual Rigidity**: This learned aversion to mistakes contributes to **cognitive inertia** and **conditioned subconscious compliance**. Conditioned to obey predefined rules and "correct answers" in school, adults tend to exhibit rigidity when encountering new ideas. This lack of flexibility limits cognitive adaptability, causing the fight or flight response to be triggered whenever core beliefs are challenged, leading them to prioritize self-justification over genuine understanding.

Thus, the education system's emphasis on rightness as survival leads to adults who subconsciously experience cognitive dissonance as a threat. This **instinctive response activates a cycle of belief perseverance, avoidance, and self-deception**, reinforcing a mental and physiological barrier against cognitive flexibility and growth.

The Origin of the Education System

The origins of the cognitive impasse phenomenon can be traced back to the evolution of Rome's education system, which underwent significant transformations across distinct historical phases. These changes were driven by shifts in societal values, political landscapes, and external cultural influences, ultimately laying the groundwork for the rigid intellectual frameworks observed in contemporary contexts.

During the Early Republic (c. 509–300 BCE), Roman education was predominantly informal and family-centered. The primary focus was on imparting practical skills essential for farming, warfare, and maintaining household traditions. Moral education and social norms were directly transmitted by family members, fostering a sense of duty and adherence to established customs. This foundational period emphasized experiential learning and the internalization of societal roles, creating a cohesive and disciplined populace capable of sustaining the republic's stability.

The Hellenistic Influence (c. 3rd–2nd century BCE) marked a pivotal shift as Rome expanded its territories, leading to the infusion of Greek culture and philosophy into Roman education. Wealthy Romans began to employ Greek tutors who introduced subjects such as philosophy, rhetoric, and literature. This period saw the emergence of grammar schools, where rhetoric and public speaking became crucial for political and social advancement. The adoption of Greek intellectual traditions encouraged a more analytical and expressive form of education, broadening the scope of learning beyond mere practical skills to include critical thinking and eloquent discourse.

In the Empire Period (c. 1st century BCE–5th century CE), education became more formalized and institutionalized, serving as a status symbol for the elite. The establishment of schools dedicated to diverse subjects signified a recognition of education as a marker of social prestige and intellectual capability. Quintilian's *Institutio Oratoria*, developed in the 1st century CE, exemplified this comprehensive educational model aimed at cultivating ideal citizens and proficient orators. Although there was a slight increase in educational accessibility, the system remained predominantly exclusive to the upper echelons of society, reinforcing social hierarchies and intellectual elitism.

The Late Empire and Christian Influence (c. 4th–5th century CE) introduced a transformative shift as Christianity ascended to prominence, reshaping the educational paradigm from civic and rhetorical studies to religious instruction. Classical texts were subjected to scrutiny, and educational priorities shifted towards spiritual development under the guidance of Christian leaders. The closure of prominent institutions, such as the Academy in Athens by Emperor Justinian in 529 CE, symbolized a decisive move towards a Christian-centered education system. This transition underscored the increasing intertwining of religious doctrine with intellectual pursuits, further entrenching hierarchical and dogmatic structures within the educational framework.

Following the fall of the Western Roman Empire in the 5th century, formal education in the West experienced a decline. Monastic schools emerged as the primary custodians of classical knowledge, preserving texts and scholarly traditions within a predominantly religious context. This period saw education diverging from its secular and civic roots, becoming largely confined to religious institutions. The preservation efforts of monastic scholars ensured the continuity of classical learning, yet the shift towards religious education perpetuated a system that valued obedience and rote memorization over critical inquiry and intellectual flexibility.

The educational model established by Rome in the 4th century CE profoundly emphasized memory discipline and intellectual rigor, forming the foundation of Western thought. Designed to consolidate control and standardize knowledge across Rome's vast and varied empire, this system instilled a subtle rigidity in the minds it molded. Over time, it evolved to foster not just retention but a mental framework inclined toward compliance, hierarchical thinking, and a resistance to cognitive divergence.

This transformation marked a significant departure from the earlier philosophical, hypothetical, and thought-explorative approaches to education. Instead of encouraging creative upbringings and intellectual exploration, the system shifted towards rigid memorization tactics designed to instill compliance and obedience to the empire. The intention was to create a populace loyal not to the empire itself, but to the first learned knowledge and traditions ingrained through education. This subtle yet profound shift redirected loyalty from the governing structures to the established educational doctrines, reinforcing a cycle of adherence to tradition over innovation.

This control over religious and intellectual narratives is evident in the transformation of Greek and Roman mythologies. Creative and exploratory aspects of these rich traditions were gutted and rewritten into the uninspiring, unappealing, and often disastrous narratives found in the Bible. Cognitive biases play a significant role in making these revised stories appear more appealing and authoritative, masking the loss of creative depth and critical inquiry. Tales from Greek and Roman mythologies, such as those by Homer, were systematically altered to fit the rigid, dogmatic frameworks imposed by the Christian-influenced education system. This rewriting not only suppressed the original creative and philosophical essence but also embedded a form of cognitive impasse that prioritized obedience to revised narratives over the exploration of diverse and imaginative ideas.

Transmitted through monastic schools and later through medieval universities, Rome’s educational legacy embedded memory discipline and obedience at the core of learning. This model discouraged deviation and innovation, embedding cognitive biases that emphasized hierarchical and compliance-based thinking. The persistence of these educational principles through centuries of monastic and medieval academic traditions reveals how traditional systems and ingrained biases can subtly restrict critical thinking and openness to new ideas. Consequently, the "unstoppable force" set into motion by Rome's educational reforms became a way of thinking that shaped Western culture for centuries, promoting continuity yet limiting intellectual expansion. This historical trajectory underscores the profound impact of educational structures on cognitive processes, highlighting the enduring legacy of Rome’s approach in fostering a cognitive impasse that continues to influence modern educational and social paradigms.

10.6084/m9.figshare.27367785

Introduction to Additional Biases and Learned Behaviors

1. **Cognitive Impasse**: A mental state where accumulated cognitive biases and mental rigidity prevent progress in thinking or problem-solving, consisting of eight stages embodying all cognitive biases.
2. **Bleak Retrospection**: The tendency to remember past events more negatively than they were, focusing on hardships and undervaluing positive experiences, which can discourage future endeavors due to a pessimistic self-view.
3. **Utopian Forecasting**: The inclination to envision the future unrealistically positively, ignoring potential challenges, leading to under preparation and disappointment when reality doesn't meet expectations.
4. **Dystopian Forecasting**: Anticipating the future as significantly worse than the present, focusing on negative possibilities, which fosters anxiety and hinders proactive efforts for positive change.
5. **Always Has Been Bias**: Resisting change by believing that longstanding methods are inherently better, often becoming hostile toward new ideas and stifling innovation combined in conjunction with the ‘Not Invented Here’ bias and Semmelweis Reflex.
6. **Projecting Inferiority**: Rejecting others' ideas due to one's own feelings of inadequacy, undermining collaboration and hindering personal and group growth.
7. **Cognitive Dissonance Avoidance**: The inability to continue interacting with information that conflicts with one's beliefs, often causing effects like inability to read, understand speech, or sudden urges to escape.
8. **Projected Conformity**: Assuming others will conform to societal norms, leading individuals to align their actions accordingly, which suppresses individual expression and diversity of thought.
9. **Projected Introspection**: Believing others engage in the same level of self-reflection as oneself, leading to unrealistic expectations and misunderstandings in relationships.
10. **Proper Channels Bias**: Resisting change by exaggerating the complexities and barriers to implementing new ideas, effectively blocking progress by misrepresenting difficulties.

11. **Self-Imposed Stagnation**: Reluctance to adopt new methods or ideas due to a fixed mindset and fear of failure, often citing past failures to justify inaction and hindering growth.

12. **Denial of Refutation (DOR)**: Refusing to accept or engage with evidence that contradicts one's beliefs, dismissing it without meaningful consideration, preventing belief updating.

13. **Rejection of Refutation**: Dismissing the need to refute new evidence without genuine evaluation shuts down debate, maintains rigid views, and can lead to harassing others to prevent open dialogue..

14. **Elicited Grace**: Avoiding accountability by shifting blame to external factors, reframing situations to appear constrained or victimized, which hinders genuine problem-solving.

15. **Imposed Inferiority**: Believing one cannot effect change because others are equally powerless, leading to collective resignation and self-perpetuating this cycle through imposition of inferiority.

16. **Incremental Ignorance**: Overlooking minor issues as insignificant, allowing them to accumulate into larger problems and resulting in preventable failures causing them not to understand why it failed.

17. **Auto-Conformance**: Automatically and subconsciously adhering to outdated conditioned behaviors ingrained through significant exposure from past experiences, hindering adaptability and the adoption of more effective practices **usually imposed by family and the education system giving an individual the subconscious need to be correct often leading to self-manipulation.**

18. **Conditioned Inheritance**: The transmission of behaviors and attitudes across generations based on learned responses, perpetuating outdated methods unless consciously challenged once the ‘Always Has Been,’ Auto-Conformance, and other biases are broken.

19. **Invulnerability Bias**: Believing oneself immune to risks that affect others, leading to disregard for warnings and engaging in reckless or overconfident behavior.

20. **Source Attribution Bias**: Persistently questioning the authenticity of information sources that contradict one's beliefs, stemming from unwillingness to reconsider initial views, often labeling something as being photoshopped or A.I. as a means of streamlined dismissal.

21. **Galileo Fallacy**: Dismissing new ideas by assuming established experts have already explored all insights, thereby stifling exploration and critical inquiry.
22. **The 'Too Long; Didn't Read' Bias**: Assuming lengthy information is a waste of time, disregarding valuable insights that could take years to learn through experience.
23. **Imposed Infamication**: Attempting to discredit someone by associating them with stigmatized elements, thereby imposing inferiority and perpetuating a cycle of discredit.
24. **Academic Distorting Bias**: Manipulating data or methodologies to align findings with preconceived theories, leading to flawed research and perpetuating errors due to unconscious bias.

The Phenomenon of the Cognitive Impasse

Stage 1: Manifested Responses

When confronted with challenging information, individuals often exhibit immediate, automatic responses. These reactions serve as defense mechanisms to alleviate discomfort and maintain cognitive security. Stage 1: Manifested Responses encompasses three primary facets: physical responses, cognitive responses, and verbal and non-verbal signals that indicate the beginning of a cognitive impasse.

Physical Responses

Immediate Reactions: Physical responses such as laughing, smirking, or eye-rolling are common defenses against discomfort when faced with challenging ideas. For instance, laughing at a funeral may occur because individuals are unprepared to reconcile the deeply held belief that someone who was alive is now gone. This inappropriate laughter serves as a release of tension and a temporary barrier to processing painful emotions. Similarly, comedy often thrives on the unexpected; people laugh because they encounter something they didn't anticipate, which momentarily disrupts their cognitive patterns. This laughter releases chemicals in the brain that can foster personal change without directly challenging existing beliefs. These physical reactions create a buffer against cognitive dissonance, allowing individuals to momentarily avoid confronting uncomfortable truths.

Cognitive Responses

Anger and Mockery: Initial cognitive reactions may manifest as anger or mockery due to discomfort with unfamiliar perspectives. For example, an initial chuckle at a provocative statement may quickly turn into frustration as the reality of the challenging information sets in. This shift can activate the fight-or-flight response, signaling a deeper resistance to engaging with the new idea. Mocking a new concept serves to belittle it, making it easier to dismiss without genuine consideration. This reaction protects existing beliefs by undermining the credibility of the challenging information. These cognitive responses highlight the mind's attempt to defend itself against ideas that threaten established viewpoints.

10.6084/m9.figshare.27367785

Verbal and Non-Verbal Signals of Cognitive Impasse

The combination of certain verbal and non-verbal cues indicates the onset of a cognitive impasse, where self-awareness becomes crucial. **Verbal noises** such as "scoff," "psh," "pfft," or a sarcastic "ha!" reflect defensive resistance, disbelief, and cynicism, signaling a reluctance to engage with challenging content. Phrases like "Yeah, right," "Whatever," or "Give me a break" serve to quickly shut down further consideration of the topic.

Non-verbal gestures such as eye-rolls, raised eyebrows, smirks, and head shakes reinforce verbal dismissals, conveying skepticism or disdain. Body language like crossing arms, shaking the head, or turning away physically distances the individual from the uncomfortable information.

Internal thoughts play a significant role in signaling cognitive impasse. Thoughts like "This is absurd," "What nonsense," or "Completely wrong" reflect an internal effort to swiftly negate challenging ideas. Mentally labeling someone as a "conspiracy theorist" or "flat-earther" serves to categorize the information as unworthy of consideration. These verbal and non-verbal signals demonstrate the mind's defense mechanisms kicking in to preserve cognitive equilibrium.

10.6084/m9.figshare.27367785

Stage 2: Cognitive Inertia

The onset of cognitive inertia reflects the mind's tendency to resist change when faced with increasingly challenging ideas. As new information conflicts with existing beliefs, the mind may slow down or halt the processing of this information. Each accumulated bias acts as a layer of resistance, making it progressively harder to assimilate new perspectives. This stage embodies a progressive mental block that hinders intellectual growth and adaptability, solidifying the cognitive impasse. Cognitive dissonance begins immediately; however, a redefinition based on experience, observation, and study of true dissonance does not occur until stage 6.

Stage 3: Semmelweis Reflex

The **Semmelweis Reflex** captures the instinctive rejection of ideas that challenge established beliefs. Named after Ignaz Semmelweis, who introduced handwashing to reduce infections but faced dismissal and ridicule because his findings conflicted with accepted medical practices, this reflex highlights how valuable insights are often disregarded due to the comfort of familiar beliefs. In modern contexts, innovative ideas or revolutionary theories frequently encounter similar resistance, leading to missed opportunities for advancement. Recognizing this reflex allows individuals to remain open to new information despite initial resistance, fostering a more progressive intellectual environment.

10.6084/m9.figshare.27367785

Stage 4: Cognitive Dissonance Avoidance

Cognitive Dissonance Avoidance is a psychological and physical response where individuals experience discomfort from conflicting beliefs and attempt to evade challenging information before dissonance sets in. This avoidance often surfaces through sudden physical symptoms such as headaches, fatigue, nausea, blurry vision, or difficulty hearing. Mental distractions like an urge to focus on unrelated tasks—remembering a minor chore, a phone call, or a previously postponed errand—also serve as escape mechanisms. Additionally, behaviors like excessive daydreaming, suddenly feeling tired, or even falling asleep can emerge. These reactions reflect a resistance to engaging with conflicting ideas and often deepen with age, leading to phrases like "You can't teach an old dog new tricks," which project personal resistance to change rather than an actual learning incapacity. Recognizing these avoidance tactics is essential for overcoming barriers to new learning and fostering continuous intellectual growth. Relaxation techniques, such as lying back, closing the eyes, and listening to intense classical music, may help ease resistance, allowing for a more open approach to challenging ideas.

Stage 5: Projecting Biases to Protect the Status Quo

Projection biases involve redirecting internal conflicts onto others, affecting how we interpret others' motivations and actions. This stage encompasses several specific biases, including the **Galileo Fallacy**, which has been incorporated to enhance the understanding of projecting biases.

Imposed Inferiority

This bias fosters the belief that meaningful change is futile because everyone is equally powerless, reinforcing collective resignation. It creates a cycle of inaction that is imposed onto those attempting change, **causing them to perpetuate the cycle by projecting inferiority.**

Projected Conformity

Assuming that others will conform to social norms convinces individuals to remain inactive, as they perceive their peers as equally conforming, leading them to conform themselves.

Projecting Inferiority

Arising from either a personal inadequacy or from having inferiority projected onto them: this bias leads individuals to reject others' contributions as inferior, believing they themselves couldn’t contribute similarly. This undermines collaborative potential and damages group dynamics by eroding collective confidence and perpetuates through imposed inferiority.

Galileo Fallacy

The **Galileo Fallacy** reflects dismissive thinking rooted in the assumption that established systems account for all possible insights, leading to the rejection of new ideas. Common phrases associated with this fallacy include, **"You don't think they thought of that?"** or **"Oh, you're the one to figure it out after millions have looked at it?"** This bias undermines individuals who challenge norms, discouraging exploration and critical inquiry. By assuming that existing frameworks are comprehensive, the Galileo Fallacy dismisses novel perspectives and innovations, reinforcing the cognitive impasse.

Stage 6: Cognitive Dissonance (Reworked)

Cognitive dissonance can range from mild discomfort to an intense sense of impending doom that gradually intensifies, often accompanied by headaches and visceral discomfort that **eventually extends** into the gut, connecting the feeling of impending doom from the head to the gut, and bringing on a sense of massive guilt, anguish, and mental turmoil. As belief interference increases, discomfort intensifies, especially with active resistance. In severe cases, the struggle to maintain deeply held beliefs while receiving contradictory information can provoke nausea or even vomiting, with discomfort worsening the more the new information is resisted. If unresolved, belief perseverance may reinforce the original belief, making future change increasingly difficult.

10.6084/m9.figshare.27367785

Stage 7: Cognitive Biases

Cognitive biases act as mental shortcuts that offer comfort through familiar perspectives. With over 200 recognized types—such as confirmation bias and selective recall—these biases reinforce existing viewpoints while downplaying new information. They function as a defense mechanism to preserve familiar beliefs, providing cognitive security by maintaining a consistent worldview. Overcoming cognitive biases requires conscious effort, self-awareness, and a willingness to challenge one's own thinking. By actively identifying and addressing these biases, individuals can enhance resilience and adaptability, breaking free from the constraints of cognitive impasse.

10.6084/m9.figshare.27367785

Stage 8: Belief Perseverance

Belief perseverance occurs when individuals cling to initial beliefs despite contradictory evidence. This results in a fixed worldview and fosters a false sense of closure, where individuals feel no need to reassess their beliefs. Openness to reevaluation promotes adaptability and growth, while resistance to change hinders intellectual development. In extreme cases, cognitive resistance can lead to **motivated forgetting**, where conflicting ideas are entirely suppressed to avoid discomfort. Active self-awareness and continuous self-examination are essential to overcoming belief perseverance, helping individuals remain open to new information and perspectives.

Contributing Factors to Cognitive Impasse

The educational model established by Rome in the 4th century CE emphasized memory discipline and intellectual rigor, inadvertently creating mental frameworks inclined toward compliance and resistance to cognitive divergence. This system fostered various cognitive biases that reinforce the cognitive impasse.

Conditioned Compliance

Conditioned Compliance represents the learned tendency to equate obedience with understanding, shaped by authoritarian learning environments. In Roman education, the emphasis on rote memorization and relentless repetition fostered a compliance-based learning model where obedience became synonymous with comprehension. This conditioning discourages questioning and fosters an environment where traditional structures persist unchallenged, limiting autonomy in decision-making and intellectual exploration.

Projecting Inferiority

Projecting Inferiority involves rejecting external ideas due to underlying feelings of inadequacy. In ancient Roman education, reverence for "classical" knowledge promoted an internalized sense of inferiority among learners. Individuals with this bias might dismiss or undervalue others' suggestions, hindering personal growth and stifling collaboration. This attitude reinforced a rigid intellectual hierarchy, where challenging accepted norms was viewed as insolence rather than intellectual engagement.

Cognitive Impasse

Cognitive Impasse describes a situation where rigid thinking obstructs progress in problem-solving or decision-making, often due to stress, mental rigidity, or conflicting thoughts. Arising from the strict adherence to learned frameworks, this phenomenon leads to blocked cognitive pathways, making critical re-evaluation mentally challenging. Individuals struggle to overcome the intellectual roadblocks imposed by the Roman educational model, experiencing reduced productivity and frustration that inhibits exploration beyond established boundaries.

Projected Conformity

Projected Conformity involves assuming that others will follow societal norms or group behaviors, leading individuals to modify their actions to align with perceived group expectations. In Roman education, the focus on hierarchical and repetitive learning perpetuated this bias, curbing individual expression and diminishing the diversity of thought essential for intellectual innovation. This overestimation of shared values and behaviors fosters conformity without genuine agreement, stifling creative and critical thinking.

Projected Introspection

Projected Introspection is the assumption that others engage in the same degree of self-reflection and critical analysis as oneself, leading to unrealistic expectations in collaboration. Within Roman education, students likely projected their mental discipline and obedience onto others, expecting uniformity of intellectual rigor and moral introspection. This bias led to misunderstandings, as those who followed rigid educational systems assumed an equal level of analytical engagement across all social strata, further entrenching established ideologies.

Imposed Inferiority

Imposed Inferiority is the belief that one cannot effect meaningful change due to collective resignation, leading individuals to feel powerless within hierarchical structures. Roman education's reinforcement of classical knowledge and authority figures created a sense of inferiority that discouraged learners from seeking new ideas. This collective resignation led to a cycle of inaction, solidifying mental barriers to progress and reinforcing the notion that the status quo was both inevitable and unalterable.

Incremental Ignorance

Incremental Ignorance describes the tendency to overlook minor issues or adverse events by viewing them as individually insignificant. In Roman education, this behavior allowed smaller intellectual constraints to accumulate unnoticed, reinforcing rigid mental frameworks over time. As minor restrictions on thought went unchallenged, they compounded, eventually resulting in larger intellectual constraints that significantly limited critical thinking and adaptability.

Auto-Conformance

Auto-Conformance refers to the automatic adherence to outdated rules or behaviors ingrained through past experiences. In Roman education, repeated exposure to authoritative, memory-based learning instilled automatic conformity to tradition, reducing adaptability and innovation by solidifying a reliance on inherited knowledge rather than fostering adaptive thinking. This bias diminishes the ability to assess the current relevance of rules, leading to inefficiency and resistance to necessary changes.

Conditioned Inheritance

Conditioned Inheritance is the transmission of behaviors, attitudes, or traits across generations based on learned responses to familial or societal expectations. In the Roman educational model, this self-perpetuating cycle enforced traditional, rigid methods unless actively challenged. The inheritance of conformity and hierarchical values perpetuated Rome's structured, compliance-based mindset through monastic schools and medieval universities, embedding resistance to deviation within Western intellectual culture. Transmitted through centuries of monastic and medieval educational systems, this model emphasized memory discipline and obedience, subtly molding Western culture to prioritize continuity over intellectual diversity. By encouraging rigid adherence to established norms, the Roman legacy quietly limited the openness and adaptability essential for intellectual growth, reinforcing a form of **Cognitive Impasse** that has influenced critical thinking and educational structures even today.

Conclusion

The legacy of the educational model established in the 4th century CE reveals how learned behaviors and cognitive biases can perpetuate a cycle of mental rigidity and resistance to new ideas. Recognizing and understanding the stages of manifested responses and the various cognitive biases—including the Galileo Fallacy—that contribute to cognitive impasse is crucial. By fostering self-awareness and actively challenging these biases, individuals can break free from these constraints, promoting adaptability, intellectual growth, and a more open-minded approach to learning and collaboration.

[Supplementary]

False Conspiratorial Factors Noticed by Society

Supplemental Letter to Enhance Understanding

Following a post detailing the harmful effects of a common drug, a concerning pattern emerged: not only was this specific content removed, but all content vanished across three different social platforms. Though Reddit remained inactive, the platform's moderation trends suggest that bias, more than censorship, influences content regulation—something often associated with **YouTube** and **Facebook**. Thus, the question arises: if Reddit isn't censoring, what contributes to this suppression?

Cognitive Bias in Content Moderation

Social media platforms, even without explicit censorship, create environments where dissenting content becomes suppressed through **algorithmic moderation** or **user-driven reporting**. ***Cognitive bias*** often becomes so pervasive that it manifests as hostility toward conflicting information, resembling behaviors historically seen in entities like the **Holy Roman Empire**, where ideological conformity overshadowed rational discourse, and even caused an elated joy when burning their victims alive, similar to how some acted within the Holocaust camps.

Many online users critique platforms for perceived censorship. This perspective once led to disillusionment with a previously respected organization due to a lack of accountability and transparency. In contrast, companies like **Twinings** or **Germany** openly address historical actions, while institutions like the **Vatican** continue to deny them. Similarly, Reddit's perceived issues of **mob mentality** and censorship stem less from platform-driven censorship and more from underlying biases. Users might feel as though responses are "programmed," unknowing that these deflections are learned behaviors, and that the overall removal of content is often attributing these patterns as government interference or censorship, but such reactions likely stem from unrecognized biases, shaping responses to people, groups, and ideas alike.

Rather than being a result of **censorship**, Reddit's environment reflects a consequence of **non-censorship**. It's a platform filled with users holding diverse, often opposing beliefs, leading to criticism of ideas that defy both sides. This phenomenon is not unique to Reddit; biases directed at people, groups, or organizations become apparent once recognized and examined for their influence on thoughts and behaviors.

Algorithmic Influence and Cognitive Bias

Repeated reporting of certain content reinforces patterns in **machine learning algorithms**, which then identify similar content as problematic. This creates a feedback loop where user biases inadvertently contribute to content suppression, resulting in perceived censorship that is more accurately an outcome of **user-driven biases**. ***Algorithms***, designed to mirror data inputs, naturally inherit these biases, generating a self-reinforcing loop that amplifies dominant viewpoints while downplaying others.

These biases integrate into algorithms through **positive data weighting**, creating patterns that align with users' subconscious preferences to avoid conflicting perspectives. Misinterpretations of content removal as **conspiracies** arise from a lack of understanding of these underlying mechanisms, where biased data patterns merge with algorithmic reinforcement.

Cognitive Impasse: A Comprehensive Bias Form

"Cognitive Impasse" encapsulates dynamics observed over years of studying online moderation and cognitive biases. ***Cognitive Impasse*** describes the state where conflicting information, regardless of validity, is dismissed or attacked to maintain existing beliefs. This advanced stage of entrenchment, drawing from elements of established biases, perpetuates itself through a sustained hostility toward contradictory perspectives. Like relics from the ancient (pre-Holy Roman Empire) Roman system, this mechanism sustains not by enforced censorship but through internalized, unchallenged biases.

Discussion

Platforms like **Reddit** may appear toxic or hypersensitive due to minimal enforced censorship. With little structured moderation, **cognitive biases** run unchecked, and shared opinions encounter hostility or indifference, as like-minded users often avoid intervening due to ***projected conformity***. ***Cognitive Impasse*** contributes to these behavioral patterns, allowing biases to persist without regulatory interference.

For instance, the ***Dunning-Kruger effect*** is often cited by individuals who ironically exhibit it themselves, dismissing others' understanding while failing to recognize their own limitations. Effective self-assessment relies on asking ***"why," "how," and "what"*** rather than settling for ***"this is how it works,"*** which restricts broader understanding. In high school, selective and confirmation biases often prompted dismissal of information that contradicted certain arguments, leading to ***cognitive dissonance*** and associated feelings of mental strain.

Cognitive Impasse Self-Assessment

This 14-minute self-assessment offers insight into how personal and collective biases affect **information acceptance. It is the accumulative effort of my life observations.**

Cognitive Impasse Self Assessment. (2024, October 31). Github Pages. https://andylehti.github.io/cognitive-impasse

Recommendations for Overcoming Cognitive Impasse

- **Develop Self-Awareness**: Regularly reflect on your reactions to challenging information to identify automatic defense mechanisms. Observe physical, cognitive, and emotional responses without judgment to understand underlying biases.

- **Embrace Openness**: Cultivate a mindset open to new ideas, recognizing that questioning established norms is essential for growth. Encourage curiosity and willingness to explore unfamiliar perspectives.

- **Challenge Cognitive Biases**: Educate yourself on common cognitive biases, including the Galileo Fallacy, and actively work to mitigate their influence on your thinking. Acknowledge and address biases as they arise in your thought processes.

- **Foster Critical Thinking**: Engage in activities that promote analysis, evaluation, and synthesis of information from multiple perspectives. Develop skills in reasoning and logical assessment to better navigate complex ideas.

- **Encourage Lifelong Learning**: Counter the notion that "you can't teach an old dog new tricks" by continually seeking new knowledge regardless of age. Embrace opportunities for education and intellectual development throughout life.

- **Address Avoidance Behaviors**: Recognize when avoidance manifests as an inability to process information and take steps to re-engage with the material. Implement strategies to manage discomfort and persist in understanding challenging concepts.

- **Promote Dialogue**: Participate in discussions with diverse groups to expose yourself to different viewpoints and challenge your assumptions. Engage in respectful debates and collaborative problem-solving to enhance cognitive flexibility.

By implementing these strategies, individuals and educational institutions can move towards a more adaptive and innovative intellectual culture, breaking the cycle of cognitive impasse. Embracing change and fostering open-mindedness are essential steps toward a more dynamic and progressive intellectual landscape. Through increased self-awareness and a commitment to challenging inherited biases, it is possible to overcome the cognitive impasse that hinders personal and collective growth. Embracing change and fostering open-mindedness are essential steps toward a more dynamic and progressive intellectual landscape.

Discovered Biases

Source Attribution Bias is a cognitive bias where individuals persistently question a source's authenticity when it contradicts their established beliefs. In visual media, those affected by this bias may dismiss a photo as "Photoshopped," and when shown further evidence, like a video, label it as "AI-generated." This recurring skepticism stems from an unwillingness to reconsider initial views, leading to repeated attributions of inauthenticity.

This bias is largely driven by two underlying mechanisms:

- **Confirmation Bias**: Individuals interpret information in ways that reinforce their pre-existing beliefs. If someone believes a photo or video is manipulated, they are inclined to maintain that belief, reinterpreting evidence to support their initial assumption, even in the face of contrary information.

- **Cognitive Dissonance**: Encountering evidence that challenges one's beliefs creates psychological discomfort. To ease this discomfort, individuals shift their reasoning, moving from one attribution ("it's Photoshopped") to another ("it's AI-generated"), rather than considering the possibility that their original assumption may be incorrect.

Together, these biases sustain *Source Attribution Bias*, making individuals resistant to changing their viewpoint despite credible, contradictory evidence.

Bleak Retrospection is a cognitive bias where individuals recall past events as more negative than they actually were, focusing on hardships and challenges while overlooking positive experiences. For example, a person might remember a previous job only for its stressful deadlines, ignoring the professional growth and friendships gained. This skewed recollection can lead to undervaluing past achievements and fostering a pessimistic view of one's personal history.

This bias is influenced by two main factors:

- **Current Emotional State**: Negative emotions in the present can color memories of the past, causing individuals to recall events more bleakly.

- **Selective Memory**: Individuals may unconsciously focus on negative memories that confirm their current outlook, reinforcing a cycle of pessimism.

Together, these factors contribute to *Bleak Retrospection*, potentially impacting self-esteem and discouraging engagement in new opportunities due to a distorted perception of past experiences.

Utopian Forecasting is the tendency to envision the future in an unrealistically positive light, overlooking potential challenges and obstacles. For instance, an entrepreneur might start a business expecting immediate success without accounting for market competition or financial risks. This overly optimistic outlook can result in inadequate preparation and underestimation of the effort required to achieve goals.

This bias is driven by:

- **Optimism Bias**: The belief that one is less likely to experience negative events, leading to unrealistic expectations.

- **Invulnerability Bias**: A sense of immunity to risks that affect others, reinforcing the assumption that success is guaranteed.

These factors sustain *Utopian Forecasting*, which can lead to disappointment and setbacks when reality does not meet idealized expectations.

Dystopian Forecasting involves anticipating the future as significantly worse than the present, focusing on potential failures and negative outcomes. For example, an employee might believe that organizational changes will lead to job loss, despite evidence of company growth. This pessimistic outlook can contribute to anxiety and a sense of helplessness, hindering proactive efforts to create positive change.

Underlying mechanisms include:

- **Negativity Bias**: The tendency to give more weight to negative information, making unfavorable outcomes seem more probable.

- **Anxiety Disorders**: Elevated levels of anxiety can amplify fears about the future, reinforcing negative predictions.

Combined, these factors perpetuate *Dystopian Forecasting*, which can paralyze decision-making and inhibit constructive actions.

Always Has Been Bias is the resistance to change based on the belief that longstanding methods are inherently better, often becoming hostile toward new ideas. For instance, a manager might reject a new project management tool, insisting that the existing system has always worked fine. This mindset stifles innovation and prevents adaptation to evolving circumstances.

Contributing factors are:

- **Status Quo Bias**: A preference for things to stay the same, viewing change as a loss.

- **Fear of the Unknown**: Uncertainty about new methods can provoke anxiety, leading to rejection of alternatives.

Together, these factors enforce the *Always Has Been Bias*, hindering progress by clinging to tradition without evaluating potential benefits of change.

Projecting Inferiority is the tendency to reject others' ideas due to one's own feelings of inadequacy, undermining collaboration. For example, a team member might dismiss a colleague's innovative proposal because they feel threatened by their own perceived shortcomings. This behavior not only hinders personal growth but also disrupts group dynamics by suppressing valuable contributions.

This bias arises from:

- **Impostor Syndrome**: Doubting one's abilities, leading to insecurity around others' successes.

- **Defensive Projection**: Attributing one's own feelings of inferiority onto others to protect self-esteem.

These mechanisms reinforce *Projecting Inferiority*, creating barriers to effective teamwork and innovation.

Cognitive Impasse describes a mental state where accumulated biases and rigid thinking prevent progress in problem-solving or decision-making. For instance, a person might be unable to find a solution to a problem because they are fixated on a single approach that isn't working. This impasse can lead to frustration and decreased productivity.

Underlying factors include:

- **Mental Rigidity**: Inflexibility in thinking patterns, making it difficult to consider alternative perspectives.

- **Overload of Cognitive Biases**: Multiple biases interacting to reinforce a stuck mindset.

Cognitive Impasse embodies these challenges, highlighting the need for adaptability and openness to overcome mental blocks.

Cognitive Dissonance Avoidance is the inability to continue interacting with information that conflicts with one's beliefs, often causing discomfort or an urge to withdraw. For example, an individual might stop reading an article that challenges their political views, experiencing anxiety or irritation. This avoidance prevents reconciliation of conflicting ideas and hampers personal growth.

Key mechanisms are:

- **Psychological Discomfort**: The mental strain of holding conflicting beliefs motivates avoidance behavior.

- **Selective Exposure**: Preferring information that aligns with existing beliefs to minimize dissonance.

Together, these factors sustain *Cognitive Dissonance Avoidance*, limiting exposure to diverse perspectives.

Projected Conformity is the assumption that others will follow societal norms, leading individuals to align their actions accordingly. For instance, a new employee might adopt the office culture without question, suppressing their unique ideas. This bias can result in conformity without genuine agreement, reducing diversity of thought within groups.

Contributing factors include:

- **Desire for Social Acceptance**: The need to fit in can override personal preferences or opinions.

- **Pluralistic Ignorance**: Misjudging others' beliefs, leading to conformity based on false assumptions.

These elements perpetuate *Projected Conformity*, discouraging individuality and innovation.

Projected Introspection involves assuming that others engage in self-reflection and critical thinking to the same extent as oneself. For example, after a disagreement, a person might expect the other party to deeply analyze the situation, leading to frustration when this doesn't occur. This assumption can create unrealistic expectations and misunderstandings.

Underlying mechanisms are:

- **Egocentric Bias**: Overestimating the extent to which one's own perspective is shared by others.

- **Theory of Mind Limitations**: Difficulty accurately perceiving others' mental states or thought processes.

These factors contribute to *Projected Introspection*, affecting interpersonal relationships and collaboration.

Proper Channels Bias is a tactic used to resist change by exaggerating the complexities and barriers involved in implementing new ideas. For instance, an employee might claim that a proposed process improvement is impossible due to bureaucratic red tape, discouraging further discussion. This approach effectively blocks progress by misrepresenting the actual difficulties.

This bias stems from:

- **Resistance to Change**: A desire to maintain the status quo for comfort or self-interest.

- **Administrative Avoidance**: Using procedural hurdles as an excuse to avoid additional work or responsibility.

Together, these factors uphold the *Proper Channels Bias*, impeding innovation and efficiency.

Self-Imposed Stagnation is the reluctance to adopt new methods or ideas due to a fixed mindset and fear of failure. For example, a writer might avoid experimenting with new genres, citing past unsuccessful attempts. This resistance prevents growth and maintains the status quo despite potential benefits from adaptation.

Contributing factors include:

- **Fixed Mindset**: Believing abilities are static, leading to avoidance of challenges.

- **Fear of Failure**: Concern over potential mistakes discourages risk-taking.

These elements sustain *Self-Imposed Stagnation*, limiting personal and professional development.

Denial of Refutation (DOR) is the refusal to accept or engage with evidence that contradicts one's beliefs. For instance, someone might ignore scientific studies disproving a favored theory, insisting the evidence is flawed. This behavior prevents constructive dialogue and the possibility of updating beliefs.

Underlying mechanisms are:

- **Confirmation Bias**: Favoring information that confirms existing beliefs while dismissing opposing data.

- **Cognitive Dissonance**: Avoiding the discomfort associated with conflicting information by denying its validity.

These factors reinforce *Denial of Refutation*, maintaining rigid viewpoints.

Rejection of Refutation is when individuals refuse to give a refutation to a claim or refutation, claiming they don't need one because it is so obvious, unknowingly under cognitive impasse, yet they will continue to attack the content. For instance, a person dismisses counterarguments as unnecessary while persistently criticizing the opposing view.

This bias is driven by:

- **Emotional Investment**: Strong attachment to beliefs makes contradictory evidence threatening.

- **Defensiveness**: Protecting one's self-identity linked to specific beliefs.

Together, these factors perpetuate *Rejection of Refutation*, obstructing openness to new information.

Elicited Grace is the act of avoiding accountability by shifting blame to external factors or circumstances. For example, an employee might blame project delays on insufficient resources rather than acknowledging their own time management issues. This behavior maintains a positive self-image while preventing genuine problem-solving.

Key mechanisms include:

- **Self-Serving Bias**: Attributing successes to oneself and failures to external causes.

- **Victim Mentality**: Perceiving oneself as a victim to elicit sympathy and avoid responsibility.

These elements sustain *Elicited Grace*, impeding personal accountability and growth.

Imposed Inferiority is the belief that one cannot effect meaningful change because others are equally powerless, leading to collective resignation. For instance, community members may feel efforts to improve local conditions are futile, discouraging action. This mindset perpetuates a cycle of inaction and reinforces feelings of helplessness.

Contributing factors are:

- **Learned Helplessness**: Repeated experiences of failure lead to a sense of powerlessness.

- **Social Proof**: Observing others' inaction reinforces one's own reluctance to act.

Together, these factors maintain *Imposed Inferiority*, hindering social and personal progress.

Incremental Ignorance is the tendency to overlook minor issues or negative events, considering them insignificant individually. For example, a company might ignore small safety violations until they lead to a major accident. By neglecting these early signs, problems accumulate into significant consequences.

This bias arises from:

- **Normalization of Deviance**: Accepting minor deviations as normal, reducing sensitivity to risk.

- **Short-Term Focus**: Prioritizing immediate concerns over long-term implications.

These mechanisms contribute to *Incremental Ignorance*, emphasizing the importance of addressing issues promptly.

Auto-Conformance refers to the automatic adherence to outdated rules or behaviors ingrained through past experiences. For instance, an employee might continue using an obsolete procedure because it's familiar, despite more efficient alternatives. This conditioned response hinders adaptability and progress.

Underlying factors include:

- **Habitual Behavior**: Actions become routine over time, performed without conscious thought.

- **Conditioned Inheritance**: Learned behaviors passed down without questioning their current relevance.

Together, these elements sustain *Auto-Conformance*, limiting innovation and efficiency.

Conditioned Inheritance is the transmission of behaviors, attitudes, or traits from one generation to the next based on learned responses to expectations. For example, a family might discourage higher education because previous generations didn't attend college. This cycle enforces outdated methods and resists adaptation.

Contributing mechanisms are:

- **Social Conditioning**: Behaviors reinforced by societal or familial norms.

- **Cultural Traditions**: Valuing continuity over change to preserve identity.

These factors uphold *Conditioned Inheritance*, potentially hindering progress and personal fulfillment.

Invulnerability Bias is the belief that one is immune to risks or consequences that affect others. For instance, a driver might ignore safety regulations, believing accidents won't happen to them. This bias leads to reckless decision-making and overconfidence.

This bias is fueled by:

- **Optimism Bias**: Overestimating the likelihood of positive events while underestimating negative ones.

- **Superiority Complex**: Feeling exempt from common vulnerabilities due to a perceived elevated status.

These mechanisms perpetuate *Invulnerability Bias*, increasing exposure to avoidable dangers.

Source Attribution Bias is a cognitive bias where individuals persistently question a source's authenticity when it contradicts their established beliefs. In visual media, they may dismiss a photo as "Photoshopped," and when presented with a video, label it as "AI-generated." This recurring skepticism stems from an unwillingness to reconsider initial views.

This bias is driven by:

- **Confirmation Bias**: Interpreting information to confirm existing beliefs.

- **Cognitive Dissonance**: Shifting reasoning to avoid discomfort from conflicting evidence.

Combined, these factors sustain *Source Attribution Bias*, making individuals resistant to changing their viewpoint despite credible evidence.

Galileo Fallacy embodies the dismissive attitude that assumes established ideas have exhausted all possible insights, rendering new challenges improbable. For example, someone might say, "If that were true, experts would have already discovered it." This fallacy discourages questioning norms and stifles innovation.

Underlying mechanisms include:

- **Appeal to Authority**: Overreliance on experts to the exclusion of new ideas.

- **Closed-Mindedness**: Unwillingness to consider that existing knowledge may be incomplete.

These factors reinforce the *Galileo Fallacy*, hindering progress and critical inquiry.

The 'Too Long; Didn't Read' Bias is the assumption that lengthy information is a waste of time, leading individuals to dismiss detailed content. For example, skipping an in-depth report that could provide valuable insights due to its length. This bias can result in missing important information that requires time to understand.

Contributing factors are:

- **Hyperbolic Discounting**: Preference for immediate, short-term information over long-term benefits.

- **Information Overload**: Feeling overwhelmed by extensive content, leading to avoidance.

These elements sustain the *'Too Long; Didn't Read' Bias*, potentially limiting knowledge acquisition.

Imposed Infamication is a cognitive defense mechanism where individuals attempt to discredit someone by associating them with stigmatized elements like conspiracies. For instance, labeling a critic as a "conspiracy theorist" to undermine their credibility. This tactic imposes inferiority onto others, perpetuating a cycle of discredit and dismissal.

This bias arises from:

- **Ad Hominem Attacks**: Targeting the individual instead of addressing their arguments.

- **Social Stigmatization**: Leveraging societal biases to delegitimize opposing views.

Together, these factors contribute to *Imposed Infamication*, obstructing open dialogue and critical evaluation.

Academic Distorting Bias involves researchers manipulating data or methodologies to align findings with preconceived theories, often unconsciously. This might include selective data reporting or adjusting variables to achieve desired outcomes. Such practices compromise the integrity of research and perpetuate errors.

Underlying mechanisms are:

- **Confirmation Bias**: Seeking data that supports existing hypotheses while ignoring contradictory evidence.

- **Publication Pressure**: The demand for significant findings incentivizes distorted reporting.

These factors maintain *Academic Distorting Bias*, highlighting the need for rigorous standards and peer review in research.

---

1. Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, 95(2), 256-273. https://doi.org/10.1037/0033-295x.95.2.256

2. Rattan, A., Good, C., & Dweck, C. S. (2012). “It's ok — Not everyone can be good at math”: Instructors with an entity theory comfort (and demotivate) students. *Journal of Experimental Social Psychology*, 48(3), 731-737. https://doi.org/10.1016/j.jesp.2011.12.012

3. Eccles, J. S., & Wigfield, A. (2002). Motivational Beliefs, Values, and Goals. *Annual Review of Psychology*, 53(1), 109-132. https://doi.org/10.1146/annurev.psych.53.100901.135153

4. Rangel, U., & Keller, J. (2011). Essentialism goes social: Belief in social determinism as a component of psychological essentialism. *Journal of Personality and Social Psychology*, 100(6), 1056-1078. https://doi.org/10.1037/a0022401

5. Festinger, L., & Carlsmith, J. M. (1959). Cognitive consequences of forced compliance. *The Journal of Abnormal and Social Psychology*, 58(2), 203-210. https://doi.org/10.1037/h0041593

6. Anderson, C. A., Lepper, M. R., & Ross, L. (1980). Perseverance of social theories: The role of explanation in the persistence of discredited information. *Journal of Personality and Social Psychology*, 39(6), 1037-1049. https://doi.org/10.1037/h0077720

7. Jost, J. T., Banaji, M. R., & Nosek, B. A. (2004). A Decade of System Justification Theory: Accumulated Evidence of Conscious and Unconscious Bolstering of the Status Quo. *Political Psychology*, 25(6), 881-919. https://doi.org/10.1111/j.1467-9221.2004.00402.x

8. Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality and Social Psychology*, 77(6), 1121-1134. https://doi.org/10.1037/0022-3514.77.6.1121

9. Nickerson, R. S. (1998). Confirmation Bias: A Ubiquitous Phenomenon in Many Guises. *Review of General Psychology*, 2(2), 175-220. https://doi.org/10.1037/1089-2680.2.2.175

10. Dougherty, M. R. P., Gettys, C. F., & Ogden, E. E. (1999). MINERVA-DM: A memory processes model for judgments of likelihood. *Psychological Review*, 106(1), 180-209. https://doi.org/10.1037/0033-295x.106.1.180

11. Hilbert, M. (2012). Toward a synthesis of cognitive biases: How noisy information processing can bias human decision making. *Psychological Bulletin*, 138(2), 211-237. https://doi.org/10.1037/a0025940

12. Alexander, W. H., & Brown, J. W. (2010). Hyperbolically Discounted Temporal Difference Learning. *Neural Computation*, 22(6), 1511-1527. https://doi.org/10.1162/neco.2010.08-09-1080

13. Dardenne, B., & Leyens, J. (1995). Confirmation Bias as a Social Skill. *Personality and Social Psychology Bulletin*, 21(11), 1229-1239. https://doi.org/10.1177/01461672952111011

14. MacCoun, R. J. (1998). BIASES IN THE INTERPRETATION AND USE OF RESEARCH RESULTS. *Annual Review of Psychology*, 49(1), 259-287. https://doi.org/10.1146/annurev.psych.49.1.259

15. Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases. *Science*, 185(4157), 1124-1131. https://doi.org/10.1126/science.185.4157.1124

16. Fiedler, K. (1991). The tricky nature of skewed frequency tables: An information loss account of distinctiveness-based illusory correlations. *Journal of Personality and Social Psychology*, 60(1), 24-36. https://doi.org/10.1037/0022-3514.60.1.24

17. Schwarz, N., Bless, H., Strack, F., Klumpp, G., Rittenauer-Schatka, H., & Simons, A. (1991). Ease of retrieval as information: Another look at the availability heuristic. *Journal of Personality and Social Psychology*, 61(2), 195-202. https://doi.org/10.1037/0022-3514.61.2.195

18. Klauer, K. C., Musch, J., & Naumer, B. (2000). On belief bias in syllogistic reasoning. *Psychological Review*, 107(4), 852-884. https://doi.org/10.1037/0033-295x.107.4.852

19. Sanna, L. J., Schwarz, N., & Stocker, S. L. (2002). When debiasing backfires: Accessible content and accessibility experiences in debiasing hindsight. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 28(3), 497-502. https://doi.org/10.1037/0278-7393.28.3.497

20. Jeng, M. (2006). A selected history of expectation bias in physics. *American Journal of Physics*, 74(7), 578-583. https://doi.org/10.1119/1.2186333

21. Pronin, E., & Kugler, M. B. (2007). Valuing thoughts, ignoring behavior: The introspection illusion as a source of the bias blind spot. *Journal of Experimental Social Psychology*, 43(4), 565-578. https://doi.org/10.1016/j.jesp.2006.05.011

22. Marks, G., & Miller, N. (1987). Ten years of research on the false-consensus effect: An empirical and theoretical review. *Psychological Bulletin*, 102(1), 72-90. https://doi.org/10.1037/0033-2909.102.1.72

23. Rozenblit, L., & Keil, F. (2002). The misunderstood limits of folk science: an illusion of explanatory depth. *Cognitive Science*, 26(5), 521-562. https://doi.org/10.1207/s15516709cog2605_1

24. Patt, A. (2000). No title. *Journal of Risk and Uncertainty*, 21(1), 45-72. https://doi.org/10.1023/a:1026517309871

25. Laibson, D. (1997). Golden Eggs and Hyperbolic Discounting. *The Quarterly Journal of Economics*, 112(2), 443-478. https://doi.org/10.1162/003355397555253

26. RATH, J. (2004). The construct of problem solving in higher level neuropsychological assessment and rehabilitation*1. *Archives of Clinical Neuropsychology*, 19(5), 613-635. https://doi.org/10.1016/j.acn.2003.08.006

27. Rath, J. F., Hradil, A. L., Litke, D. R., & Diller, L. (2011). Clinical applications of problem-solving research in neuropsychological rehabilitation: Addressing the subjective experience of cognitive deficits in outpatients with acquired brain injury. *Rehabilitation Psychology*, 56(4), 320-328. https://doi.org/10.1037/a0025817

28. Hoppmann, C. A., & Blanchard-Fields, F. (2010). Goals and everyday problem solving: Manipulating goal preferences in young and older adults. *Developmental Psychology*, 46(6), 1433-1443. https://doi.org/10.1037/a0020676

29. Ewert, P. H., & Lambert, J. F. (1932). Part II: The Effect of Verbal Instructions upon the Formation of a Concept. *The Journal of General Psychology*, 6(2), 400-413. https://doi.org/10.1080/00221309.1932.9711880

30. Armstrong, J., Denniston, W. B., & Gordon, M. M. (1975). The use of the decomposition principle in making judgments. *Organizational Behavior and Human Performance*, 14(2), 257-263. https://doi.org/10.1016/0030-5073(75)90028-8

31. Ash, I. K., Jee, B. D., & Wiley, J. (2012). Investigating Insight as Sudden Learning. *The Journal of Problem Solving*, 4(2). https://doi.org/10.7771/1932-6246.1123

32. Chronicle, E. P., MacGregor, J. N., & Ormerod, T. C. (2004). What Makes an Insight Problem? The Roles of Heuristics, Goal Conception, and Solution Recoding in Knowledge-Lean Problems. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 30(1), 14-27. https://doi.org/10.1037/0278-7393.30.1.14

33. Chu, Y., & MacGregor, J. N. (2011). Human Performance on Insight Problem Solving: A Review. *The Journal of Problem Solving*, 3(2). https://doi.org/10.7771/1932-6246.1094

34. Wang, Y., & Chiew, V. (2010). On the cognitive process of human problem solving. *Cognitive Systems Research*, 11(1), 81-92. https://doi.org/10.1016/j.cogsys.2008.08.003

35. Hergovich, A., Schott, R., & Burger, C. (2010). Biased Evaluation of Abstracts Depending on Topic and Conclusion: Further Evidence of a Confirmation Bias Within Scientific Psychology. *Current Psychology*, 29(3), 188-209. https://doi.org/10.1007/s12144-010-9087-5

36. Allen, M. (2011). Theory-led confirmation bias and experimental persona. *Research in Science & Technological Education*, 29(1), 107-127. https://doi.org/10.1080/02635143.2010.539973

37. Wason, P. C. (1960). On the Failure to Eliminate Hypotheses in a Conceptual Task. *Quarterly Journal of Experimental Psychology*, 12(3), 129-140. https://doi.org/10.1080/17470216008416717

38. Lehti, A. (2024a). Familiarity phenomenon: Autonormia. 253198 Bytes. https://doi.org/10.6084/M9.FIGSHARE.26826499

39. Lehti, A. (2024b). Polar jections: introduction to the conjective and perjective types. 186323 Bytes. https://doi.org/10.6084/M9.FIGSHARE.27273132

40. Lehti, A. (2024c). Utilizing photoelectromagnetic degradation imagery for enhanced forensic assessment. 4195510 Bytes. https://doi.org/10.6084/M9.FIGSHARE.27308148

41. Lehti, A. (2024d). volume six: cognitive defensiveness: Infamicate. 96964 Bytes. https://doi.org/10.6084/M9.FIGSHARE.27098722

42. Lehti, A. (2024e). Volume two: Pertaining to the origin: espresso. 166854 Bytes. https://doi.org/10.6084/M9.FIGSHARE.26827120

43. Lehti, A. (2024). Andylehti/triadic-personality-framework [Python]. https://github.com/andylehti/Triadic-Personality-Framework (Original work published 2024)

44. Li, W., Cui, H., Zhu, Z., Kong, L., Guo, Q., Zhu, Y., Hu, Q., Zhang, L., Li, H., Li, Q., Jiang, J., Meyers, J., Li, J., Wang, J., Yang, Z., & Li, C. (2016). Aberrant functional connectivity between the amygdala and the temporal pole in drug-free generalized anxiety disorder. Frontiers in Human Neuroscience, 10. https://doi.org/10.3389/fnhum.2016.00549

45. Warren, S. L., Zhang, Y., Duberg, K., Mistry, P., Cai, W., Qin, S., Bostan, S.-N., Padmanabhan, A., Carrion, V. G., & Menon, V. (2020). Anxiety and stress alter decision-making dynamics and causal amygdala-dorsolateral prefrontal cortex circuits during emotion regulation in children. Biological Psychiatry, 88(7), 576–586. https://doi.org/10.1016/j.biopsych.2020.02.011

Additional Sources

1. **Beard, M.** (2015). *SPQR: A history of ancient Rome*. Liveright.

2. **Bowman, A. K., Garnsey, P., & Rathbone, D.** (Eds.). (2000). *The Cambridge ancient history, Volume XI: The high empire, A.D. 70–192*. Cambridge University Press.

3. **Clark, A.** (2004). *The fathers and the children: Memory in early Christianity*. Oxford University Press.

4. **Gwynn, D. M.** (2014). *Christianity in the later Roman empire: A sourcebook*. Bloomsbury Academic.

5. **Illich, I.** (1971). *Deschooling society*. Harper & Row.

6. **Jaeger, W.** (1943). *Paideia: The ideals of Greek culture, Volume III: The conflict of cultural ideals in the age of Plato*. Oxford University Press.

7. **Kaster, R. A.** (1988). *Guardians of language: The grammarian and society in late antiquity*. University of California Press.

8. **Marrou, H. I.** (1956). *A history of education in antiquity* (G. Lamb, Trans.). University of Wisconsin Press.

9. **Marrou, H. I.** (1982). *A history of education in antiquity* (G. Lamb, Trans.). University of Wisconsin Press.

10. **Quintilian.** *Institutio oratoria*.

11. **Riché, P.** (1978). *Education and culture in the barbarian West: From the sixth through the eighth century*. University of South Carolina Press.